REMARKS

Entry of the above amendments is respectfully requested. **Note**: In response to the Notice of Non-Compliant Amendment, the amendments to the claims are now highlighted with brackets and underlining, and thus are believed to be in proper form. An indication to this effect is respectfully requested.

Claims 1, 9, 16, 17, and 22 have been amended. Claims 7 and 15 have been canceled. New claims 23 - 27 are added. Accordingly, claims 1 – 6, 8 – 14, and 16 – 27 are pending in this case. The amendments and new claims find support at, e.g., pages 10 and 12, and elsewhere in the application as filed, whereby no new matter is presented in such new claims. Please note the amendments and the new claims merely further clarify the scope of the invention such that no further search is required.

Summary of Office Action

In the Office Action mailed January 31, 2007, the Examiner rejected claims 1-3 under 35 U.S.C. § 102(b) as being anticipated by Yamazaki et al. (JP Pat. No. 2001-178,434). The Examiner rejected claims 1-3, and 9-14 under 35 U.S.C § 102(e) as being anticipated by O'Neill (US Pat. No. 6,394,889). The Examiner also rejected claims 1-3, 7, and 9-22 under 35 U.S.C. § 102(b) as being anticipated by L'Esperance, Jr. (US Pat. No. 5,312,320). The Examiner rejected claim 22 under 35 U.S.C. § 102(e) as anticipated by Kliewer et al. (US Pat. No. 6,572,606). The Examiner rejected claim 4 under 35 U.S.C. § 103(a) as being unpatentable over L'Esperance, Jr. in view of Morris et al. (US Pat. No. 6,472,295). The Examiner further rejected claims 5, 6, and 8 under 35 U.S.C § 103(a) as being unpatentable over L'Esperance, Jr. in view of Oikawa et al. (JP Pat. No. 10-249,571).

Applicant respectfully disagrees with the Examiner as to the art and the various interpretation(s) thereof. At least for the reasons set forth below, Applicant believes that the present claims are patentably distinct over the art of record.

Prior Art Rejections

Turning to the rejection of independent claim 1 under 35 U.S.C. § 102(a) by Yamazaki et al., 35 U.S.C. § 102(b) by L'Esperance, Jr., and under 35 U.S.C. § 102(e) by O'Neill, this claim has been amended to include recitations of emitting radiation in a range equal to about 150 nm to about 280 nm, and that the food product is subjected to photo-ablation *without* substantially heating the food product. In other words, the subject matter of claim 1 is directed to *non-thermal* or *cold ablation* of a food product.

None of the references of record identically disclose, teach, or suggest all the limitations of amended Claim 1. Specifically, regarding the Yamazaki et al., L'Esperance, Jr., and O'Neill references, these references disclose systems for performing entirely different procedures. Such references are directed toward potato skin removal using hot ablation procedures, ophthalmological surgeries, and animal hide removal using hot ablation procedures, respectively. Correspondingly, none of them disclose, teach, or suggest the recited wavelength range or photo-ablating a food product without substantially heating it. Stated another way, none of the references of record teach, suggest, or otherwise disclose *non-thermal* or *cold ablation of a food product.*

Turning to the rejection of independent claims 9, 17, and 22 under 35 U.S.C. § 102(b) made in light of L'Esperance, Jr., by analogy, the amendments herein also obviate these rejections. Amended independent claims 9 and 17 include similar recitations to those of claim 1 discussed above, whereby each of claims 1, 9, and 17 now recites radiation in a wavelength range equal to about 150 nm to about 280 nm, and photo-ablating a food product *without* substantially heating the food product. Claim 22 now also recites radiation in a wavelength range equal to about 150 nm to about 280 nm, and further recites a repetition rate equal to at least about 20 Hz. Similar to independent claims 1, 9, and 17, the operating parameters of claim 22, such as the recited wavelength range and repetition rate, effectuate *non-thermal* or *cold ablation of a food product.* The

L'Esperance, Jr. reference, directed to ophthalmological surgeries does not disclose, teach, or suggest such subject matter, nor does any other reference of record.

The amendment to independent claim 22 also obviates the rejection under 35 U.S.C. § 102(b) made in light of Kliewer et al., for the same reasons. Kliewer et al. is another reference relating to ophthalmological surgeries and does not disclose, teach, or suggest the subject matter of amended claim 22. It does not identically disclose, nor does it teach or suggest, *non-thermal* or *cold ablation of a food product* in any regard.

The Examiner then rejected claims 4, 5, 6, and 8 under 35 U.S.C. §103(a) using L'Esperance, Jr. as a primary reference and citing it in view of Morris et al. (rejection of claim 4) or Oikawa et al (rejection of claims 5, 6, and 8). These rejections rely, at least in part, upon the Examiner's misinterpretation and application of L'Esperance, Jr. Simply stated, these references are from a non-analogous art; specifically, one looking to solve food processing related problems would not reasonably look to techniques relating to ophthalmological surgeries for solutions thereto.

For example, the conditions and technical problems one faces in an ophthalmological surgery environment and those one faces in a food processing environment are completely dissimilar. Any similar apparatus used in the two distinct disciplines must be modified, adapted, and/or reconfigured to suitably perform the particular desired end use operation. In seeking guidance on how to adapt and configure a device for non-thermal or cold photo-ablation type cutting and/or processing food products (or how to solve food processing related issues), one does ***not*** reasonably look to ophthalmological surgery equipment which is adapted and configured to superficially revise the contours of the eye, such as those disclosed in of L'Esperance, Jr. and Kliewer et al.

Fundamentally, if for no other reason, during ophthalmological surgeries, the subject is a living being, whereby the subject's welfare is paramount and therefore supersedes all other considerations if there are any conflicts therewith. In stark contrast, in food processing, costs, time

efficiency, and/or other economic considerations are typically the principal considerations. In light of these and other diametrically opposed end-of-procedure goals in comparing ophthalmological surgeries to food processing procedures, Applicant reiterates that one looking to solve food processing related problems does not look to fields of ophthalmological surgeries for answers. Regardless, the amendment of independent claims 1, 9, 17, and 22 resolve any such issues.

New Claims

Although Applicant submits that the rejections to claims 1-22 have been overcome or otherwise obviated by canceling claims 7 and 15, amending claims 1, 9, 16, 17, and 22, and by the above arguments, Applicant herein submits new claims 23-27 to even further clarify the subject matter of the invention. New claims 23-27 are directed toward, e.g., power used in non-thermal or cold photo-ablating a food product, pulse durations, and repetition rates. Notably, using a pulsed laser operated at a frequency (repetition rate) as defined in the claims facilitates cold ablation in the present invention (as opposed to, for example, the Yamazaki laser which generates significant heat during operation given that it is effectively non-pulsed, which of course is of no consequence in the applications contemplated by Yamazaki). In sum, these amendments are presented in a full and good faith effort to move this case to allowance.

In light of at least the forgoing, Applicant respectfully believes that the present application is in condition for allowance. As a result, Applicant respectfully requests issuance of a notice of allowance of claims 1 – 6, 8 – 14, and 16 – 27.

Conclusion

In view of the above remarks, the objections and rejections of the present Action are believed to be overcome. As a result, claims 1 – 6, 8 – 14, and 16 – 26 are believed to be in compliance with 35 U.S.C. §§ 102, 103, and 112 and as such are believed to be in condition for allowance.

No fees are believed payable with this communication. Nevertheless, should the Examiner consider any fees to be payable in conjunction with this or any future communication, authorization is given to charge payment of such fees or credit any overpayment to Deposit Account No. 50-1170.

Should the Examiner have any questions or wish to discuss this matter further, the Examiner is invited to contact the undersigned at the below number.

Respectfully submitted,

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